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EXAMINER	
TABOR, AMARE F	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/791,414	**Applicant(s)** XIANG ET AL.	
	Examiner AMARE TABOR	**Art Unit** 2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2009*.

2a)☒ This action is **FINAL**. 2b)□ This action is non-final.

3)□ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-12,14,17 and 20-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)□ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-12, 14, 17 and 20-25* is/are rejected.

7)□ Claim(s) _____ is/are objected to.

8)□ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)□ The specification is objected to by the Examiner.

10)□ The drawing(s) filed on _____ is/are: a)□ accepted or b)□ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)□ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)□ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)□ All b)□ Some * c)□ None of:

1.□ Certified copies of the priority documents have been received.

2.□ Certified copies of the priority documents have been received in Application No. _____.

3.□ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) □ Notice of References Cited (PTO-892)

2) □ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) □ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) □ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) □ Notice of Informal Patent Application

6) □ Other: _____.

DETAILED ACTION

1. This correspondence is in response to **REMARKS** filed on 11/17/2009.

2. **Claims 10-12, 14, 17 and 20-25** are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10-12, 14, 17 and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Bahl" et al. (US 7,020,464 B2) in view of "Colie" (US 6,108,300)

As per Claim 10, Bahl teaches,

A method for maintaining secure network connections, the method comprising: duplicating [see '**migrating**' **in abstract;** and for example, col.2, lines 39-45], at the third network element [see FIG.6; '**new mobile address**' in abstract; and for example, col.6, lines 35-54. See also '**computer-readable medium**' in Claim 1, which 'handles address change of a mobile host communicating with a correspondent'], a security association [see for example **Security Associations 86 and 84** in FIG.2; and see also **IPSEC/ISKAMP SAs** in FIG.3] associated with a secure network connection between a first network element [see for example **Mobile Host 70 and 120** in FIGS.2 and 3, respectively] and a second network element [see for example **Correspondent Host 72 and 122** in FIGS.2 and 3, respectively], wherein a lookup of the security association associated with the secure network connection [see FIG.2] is not dependent on any destination address [see for example, col.11, lines 45-47: "*All traffic over the "migrated" connection now uses the new IP address of the mobile host and is secured using* ***the same*** *security association context as before.*" In other words, **Bahl** expressly discloses not changing the SA lookup when a mobile host changes from old to new address. Additionally, **Bahl** discloses 'secured control channel **96**'; and **SA end points** that are not dependent on any destination address; see for example, FIGS.2, 4A and 4B], wherein the secure network connection between the first network element and the third network element is based on the duplicated security association [see for example, col.2, lines 39-45; col.6, lines 33-34 and col.6, lines 44-47].

As shown above, **Bahl** mitigates (or duplicates) SA at the new mobile address [see abstract and Claim 1]; however, **Bahl** is silent about the third network element as being a server, and replacing the second network element with the third network element in the secure network connection with the first network element in response to detecting failure of the second network element. However, in the same filed of endeavor, **Colie** teaches a third network element [see **Backup Network Device 120** in FIG.1], and replacing the second network element with the third network element in the secure network connection with the first network element in response to detecting failure of the second network element [see abstract and FIG.1 – where **Colie** discloses transferring network services to a backup network device when a primary network device fails]. Therefore, it would have been obvious to a person having ordinary skill in the art, at the time of applicant's invention was made, to modify the system of **Bahl** by incorporating the teaching of **Colie** in order to prohibit network failure by replacing failed device a backup network device [see at least abstract of **Colie**].

As per Claim 12, Bahl-Colie combination teaches,

A method for maintaining secure network connections, the method comprising: configuring a plurality of security gateways [**Access Point 156** in FIG.3 – **Bahl** discloses 156 as access points; see for example, col.8, lines 51-61. See also at least FIGS.3 and 4 of **Coilie**] such that a lookup of security associations is not dependent on any destination address [see for example, col.2, lines 39-45; col.6, lines 33-34 and col.6, lines 44-47 of **Bahl**]; and sharing a security association [see **Security Associations 86 and 84** in FIG.2; and see also **IPSEC/ISKAMP SAs** in FIG.3 of **Bahl**] among the plurality of security gateways [see FIGS.1 and 2; and for example, col.5, lines 16-19 – where **Bahl** discloses one or more correspondent hosts. See also **Server 112a and 112b** FIG.1 of **Coilie**].

As per Claim 22, Bahl-Colie combination teaches,

A first security server comprising: a transceiver [see for example, col.8, lines 51-67 - where **Bahl** disclose DHCP server] to receive information relating to at least one security association [see **Security Associations 86 and 84** in FIG.2; and see also **IPSEC/ISKAMP SAs** in FIG.3 of **Bahl**] of a secure network connection [see secured control channel **96** in FIG.2 of **Bahl**] between a mobile client [**MH** of **Bahl**] and a second security server [access points of **Bahl**]; and a processor module to: monitor operation of the second, security server; in response to detecting failure of the second security server [see **Primary Network Device 110** in FIG.1 of **Colie**], send a message to the mobile client [see **Client** in FIG.1 of **Colie**] that the first security server [see **Backup Network Device 120** in FIG.1 of **Colie**] is taking over the secure network connection [see abstract of **Colie**]; and communicate with the mobile client using the at least one security association over the secure network connection between the first security server and the mobile client [see abstract and FIGS.2-5 – where **Bahl** discloses communicating between the MH and CH/or access points/ is based on security associations].

As per Claim 11, Bahl-Colie combination teaches,

sending at least one secure message from the third network element to the first network element to notify the first network element that the secure network connection will be taken over by the third network element [see abstract and FIG.1 of **Colie**].

As per Claim 14, Bahl-Colie combination teaches,

wherein a lookup of security associations is not dependent on any destination address [see FIGS.4A and 4B – where **Bahl** discloses **SA end points** that are not dependent on any destination address].

As per Claim 17, Bahl-Colie combination teaches, wherein communications between the mobile client and the first security server are based on a security architecture for the internet protocol (IPsec) [see **IPSEC SAs** in FIG.3; and for example, col.col.8, lines 26-50].

Claim 25 is rejected for the same reasons applied to the rejection of Claim 17.

As per Claim 20, Bahl-Colie combination teaches,

during life of the secure network connection between the first and second network elements, the third network element receiving information relating to the security association of the secure network connection from the second network element [see FIGS.2-4B of **Bahl**].

As per Claim 21, Bahl-Colie combination teaches,

wherein the first network element is a mobile client [see **MH** in FIGS.2 and 3 of **Bahl**; and **Client** in FIG.1 of **Colie**], and the second and third network elements are security servers [**Bahl** discloses access points and DHCP server. See also FIG.1 of **Colie** where network elements are disclosed as servers].

Claim 23 is rejected for the same reasons applied to the rejection of Claim 21.

As per Claim 24, Bahl-Colie combination teaches,

wherein information relating to the at least one security association is duplicated at the first and second security servers [see for example, col.2, lines 39-45; col.6, lines 33-34 and col.6, lines 44-47 of **Bahl**].

Response to Arguments

4. Applicant's arguments filed 11/17/2009 have been fully considered but they are not persuasive.

(Claim 10) As best understood from applicant's argument, applicant is arguing that the "*new address*" of Bahl cannot be equated with applicant's claimed "*third network element*"; and moreover, the

Bahl-Colie combination fails to disclose "*replacing the second network element with the third network element in response to detecting the failure of the second network element.*" Firstly, examiner would like to point out that, the prior office action does indicate the "new address" of not being the "third network element"; however (and in contract to applicant's argument), the office action explicitly was written to show that Colie cures the deficiency of Bahl (by Colie disclosing "third network element as a server, which replaces the second element with the third network element in response to detecting failure of the second element"; because Colie discloses transferring network services to a backup device in response to failure of primary network device). Second, examiner respectfully notes that, applicant's claim language does not further explain what exactly the claimed "first/second, and third network elements" are; i.e., they are simply claimed "first, …second, …and third network elements". Thus, examiner asserts that the claimed "first/second/third network element (s)" is/are given the broadest but reasonable claim interpretation; such that, these elements are interpreted as being "hardware" (e.g., as server or client) or "software" or any network element (e.g., as 'new address'). In addition, applicant is reminded that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "third element" being a client or sever or another) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

(Claim 12) As best understood from applicant's argument, applicant seems to conclude that 'since there is no sharing of SAs between gateways, because the security associations of the correspondent host and the mobile host reside in each host.' Examiner respectfully disagrees with applicant's rationale and notes that the correspondent and mobile nodes of Bahl share SAs (see at least Figs.2 and 3) in their connection; such that, the SAs are either kept same as before or changed during mobility (see at least 'Modify Security Filters' in Fig.6). Therefore, examiner respectfully notes that applicant's argument neither Bahl nor Colie failing to mention "*sharing a security association among plurality of security gateways*" is unpersuasive.

The last office action is repeated; and this action is made final.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **AMARE TABOR** whose telephone number is (571)270-3155. The examiner can normally be reached on Mon-Fri 8:00a.m. to 5:00p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, **Kambiz Zand** can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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